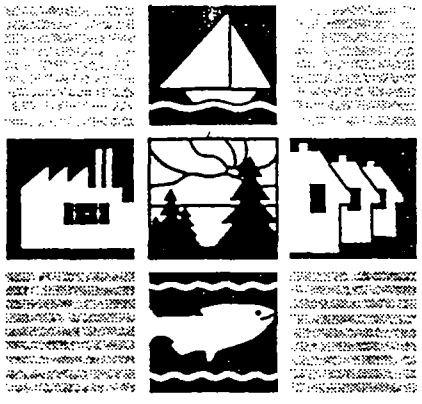
LDWSF 12.3.54
08/11/94

Wastewater Discharge Permit Application



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Clean Water—A Sound Investment

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You will find detailed instructions for completing each section of this application and each required exhibit in the enclosed packet, "Wastewater Discharge Permit Application and Exhibits–Instructions and Guidelines." Review the entire application and instruction packet carefully before completing any part of the application.

- Submit one application for each site.
- Answer all questions and include the required exhibits. Incomplete applications will be returned to you.
- If you do not have an answer for the requested information, indicate so and explain why.
- Indicate "NA" if a section does not apply to your operations.
- Use additional pages, if needed.
- No application fee is required. You will be billed a permit fee if a permit is granted.
- Send five copies of the completed application and exhibits to:

Municipality of Metropolitan Seattle
Industrial Waste Section
130 Nickerson Street, Suite 200
Seattle, Washington 98109-1658

SECTION A—BUSINESS NAMES AND ADDRESSES

APPLICANT BUSINESS NAME: Lone Star Northwest

ADDRESS OF SITE DISCHARGING WASTEWATER:	BUSINESS MAILING ADDRESS:
5900 West Marginal Way SW	5900 West Marginal Way SW
Street Address	Street Address
Seattle, WA 98106	Seattle, WA 98106
City, Zip Code	City, Zip Code

PERSON TO BE CONTACTED ABOUT THIS APPLICATION:	Telephone No. (206) 764-3032
mr. Ed Owens	Vice President-Staff
Name	Title
5975 East Marginal Way South	Seattle, WA 98111
Street Address	City, Zip Code

SECTION B—GENERAL BUSINESS INFORMATION

1. REASON FOR APPLICATION

Briefly describe the main activities at the applicant site (type of manufacturing, service, remediation).

See attached description.

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2. PERTINENT IDENTIFICATION NUMBERS AND PERMITS

Standard Industrial Classification (SIC) 5039
EPA WAD No. None
Water/Sewer Account No. See attached list
Current Metro Permit No. None

Environmental Control Permits Issued for Applicant Site:

PSAPCA Reg. # 11872

SECTION B - GENERAL BUSINESS INFORMATION

1. Reason for Application

The Lone Star Northwest West Marginal Way SW facility is a storage/transfer station for dry cement. The cement is transported by truck to concrete batch plants operated by Lone Star Northwest, and sold in dry bulk to other industrial and private users.

Before leaving the facility, fresh water supplied by the City is used to wash excess cement dust from the outside of the trucks. Analytical results presented in Exhibit D indicate the wash water has a typically high pH (from calcium and magnesium hydroxides) and contains suspended solids. No chemicals are used as part of the truck wash operation.

Based on the Schematic Flow Diagram and the Site Layout provided in Exhibits A and B and the water balance calculations provided in Section D (Exhibit H), up to 17,575 gallons of water could be generated and collected per day as part of the washing operation. This maximum water volume estimate contains 2,575 gallons of storm water from a 25-year, 24-hour design storm event. However, on a typical day-to-day basis, the amount of storm water collected in the system would be much less than the volume estimated from the design storm event.

Currently, wash water is discharged to an unlined surface water ditch located along the southern portion of the property (see Exhibits A and B). Lone Star Northwest is an environmentally pro-active company and seeks to minimize the pollution of surface waters in Washington State and other states where we do business. In so doing, Lone Star Northwest is requesting authorization to discharge wash water from the West Marginal Way SW facility to the Metro sewer system.

2. Pertinent Identification Numbers and Permits

Water/sewer account numbers for the West Marginal Way SW facility are:

- 01700560-005-5
- 01700570-005-3
- 01700540-005-0
- 01700550-005-7
- 01196340-005-3.

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SECTION C—PRODUCT AND PROCESS DESCRIPTION

1. REQUIRED EXHIBITS

EXHIBIT A: SCHEMATIC FLOW DIAGRAM
EXHIBIT B: SITE LAYOUT
EXHIBIT C: PLANNED CHANGES IN PRETREATMENT OR WASTE DISPOSAL PRACTICES
EXHIBIT D: ANALYTICAL OR HISTORICAL DATA
EXHIBIT E: SPILL PREVENTION AND CONTAINMENT PLAN
EXHIBIT F: ENGINEERING REPORT (Required only if you have wastewater pretreatment systems or are intending to install such systems.)

2. OPTIONAL EXHIBIT

EXHIBIT G: HYDROGEOLOGIC REPORTS FOR LONG-TERM GROUNDWATER REMEDIATION.

3. DAILY AND SEASONAL VARIATIONS

	No. of Operating Days/Year	No. of Operating Days/Season				No. of Employees/Shift		
		Spring	Summer	Autumn	Winter	Day	Night	Swing
Average	250	63	62	63	62	8	∅	2
Maximum	300	75	75	75	75	12	2	3

4. BUSINESS ACTIVITIES AND PRODUCTS

Business activities include both manufacturing and remediation activities.

Business Activity	Type of Product or Brand Name	Daily Quantities	
		Average	Maximum
Dry cement storage/transfer	Lone Star Cement	120,000 tons	300,000 tons

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SECTION C—PRODUCT AND PROCESS DESCRIPTION (continued)

5. RAW MATERIALS AND CHEMICALS USED IN THE PROCESS

Brand Name	Chemical, Scientific, or Actual Name	Purpose	Daily Quantities	
			Average	Maximum
Lone Star Cement	Portland Cement	concrete	120,000 tons	300,000 tons
Diesel fuel	Diesel fuel	site equipment	5 gal	10 gal
Various cleansers	various	cleaning of offices	0.001 gal	0.001 gal
solvent	Petroleum Naptha	Parts cleaning basin	0.5 gal	0.5 gal
Hydraulic fluid, oil	Hydraulic fluid, oil	site equipment	0.5 gal	1 gal

6. INDUSTRIAL WASTEWATERS DISCHARGED TO METRO SEWERS

Process That Generates Wastewater (1)	Substances Discharged to Sewer	Type of Pretreatment	Frequency (2)	Daily Quantities	
				Average	Maximum
① Truck wash	See attached list.	None proposed	b	3,600 gpd	15,000 gpd

(1) Enter a brief description and assign a number for each process. Also show these numbers in Exhibits A and B.
(2) Indicate appropriate letter: (a) continuously discharged when generated, or (b) stored and discharged in batches.

7. LIQUID WASTES AND SLUDGES REMOVED BY MEANS OTHER THAN METRO SEWERS

Type of Waste/Substance	Means of Removal	Frequency	Volume (1)
Solids from truck wash system	Landfill disposal	As necessary	10 yd^3/year
Diesel fuel / cleansers	consumed onsite	As necessary	5-10 gpd total
solvent	Recycled by Clean Care	2 months	30 gal
waste hydraulic fluid and oil	Recycled by Spencer Environmental	As necessary	500 gal

(1) Enter annual, monthly, or daily volume – or volume of each removal.

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SECTION C - PRODUCT AND PROCESS DESCRIPTION

6. Industrial Wastewater Discharged to Metro Sewers

Analytical results of the truck wash water indicate (Exhibit D):

- Biochemical oxygen demand 5 mg/L
- Total suspended solids 230 mg/L
- pH 10.6

Hazards associated with the wash water relate only to its high pH.

Truck wash water from the Lone Star Northwest West Marginal Way SW facility has not changed and is not anticipated to change over time. Therefore, pretreatment of the wash water is not proposed as part of this permit application package.

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SECTION D—WATER BALANCE

1. REQUIRED EXHIBIT

EXHIBIT H: DOCUMENTATION OF WATER BALANCE CALCULATIONS.

2. WATER BALANCE

Type of Use/Discharge	WATER IN: Water Use			WATER OUT: Water Discharge or Loss		
	Source (1)	Average (gal/day)	Maximum (gal/day)	Discharge Point (2)	Average (gal/day)	Maximum (gal/day)
Industrial processing water/wastewater	NA	NA	NA	NA	NA	NA
Contact cooling water	NA	NA	NA	NA	NA	NA
Noncontact cooling water	NA	NA	NA	NA	NA	NA
Boiler and cooling tower feed/blowdown	NA	NA	NA	NA	NA	NA
Water incorporated into product	NA	NA	NA	NA	NA	NA
Sanitary water/wastewater	a	200	340	a	195	332
Stormwater	e	17,984	600,108	a (proposed) c (ditch)	77 17,907	2,575 597,533
Plant washing water/wastewater	a	3,600	15,000	a(proposed)	3,600	15,000
Site irrigation	NA	NA	NA	NA	NA	NA
Evaporation	a e	NA	NA	e	947 17,984	947 220,628
Other	NA	NA	NA	NA	NA	NA
TOTALS	NA	21,784	615,448	NA	40,710	837,015

(1) Enter the appropriate letter for the water source:
a. City Service b. Private Well c. Reclaimed Water d. Raw Materials e. Stormwater f. Groundwater
(2) Enter the appropriate letter for the discharge point:
a. Sewer b. Storm Drain c. Receiving Water d. Waste Haulers e. Evaporation f. Product
(If the discharge is entering the sewers, also indicate the side sewer [ss] number, if available.)

SECTION E—CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

EDWARD J. QUEEN — Printed Name

VICE PRESIDENT — Title

Edward J. Queen — Signature

8/11/94 — Date

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EXHIBIT A

SCHEMATIC FLOW DIAGRAM

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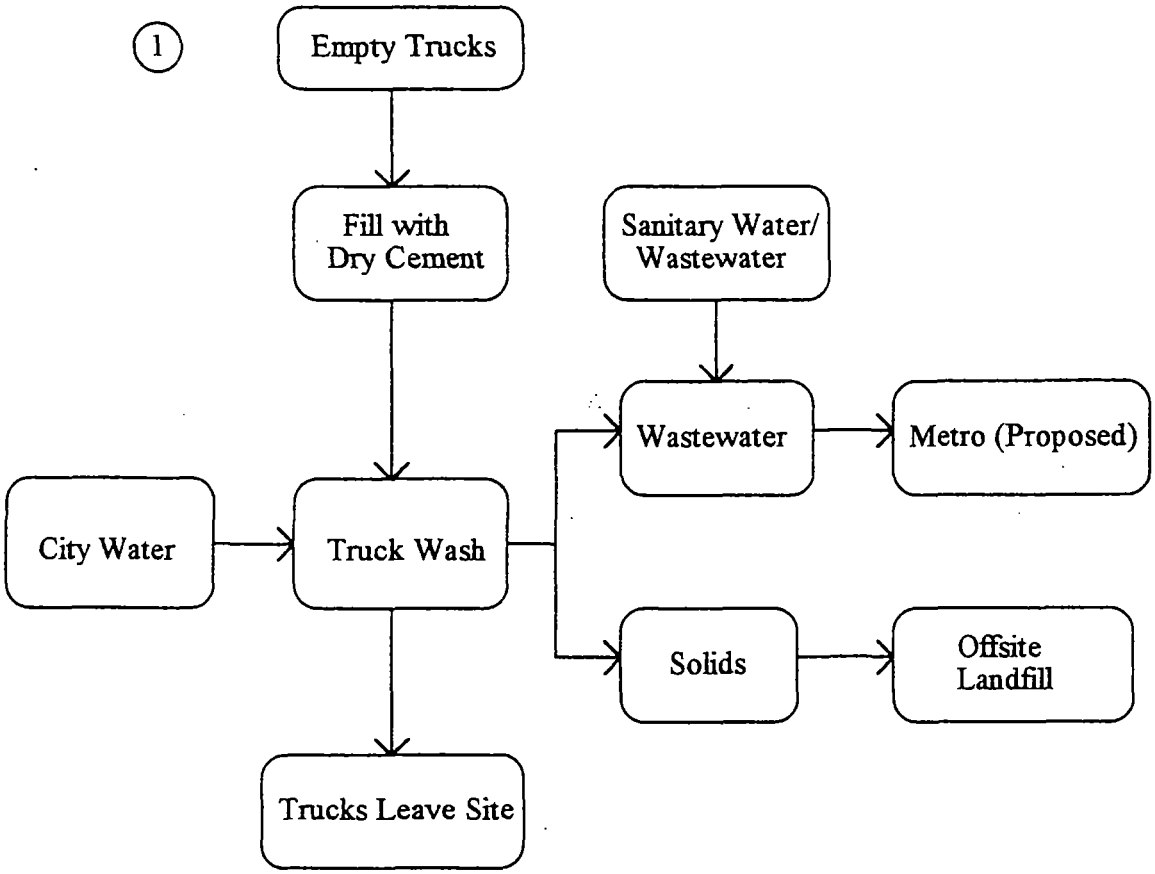

Key:

(1) A process that generates wastewater.

Exhibit A

Schematic Flow Diagram.

Lone Star Northwest
5900 West Marginal Way SW
Seattle, Washington 98106

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EXHIBIT B

SITE LAYOUT

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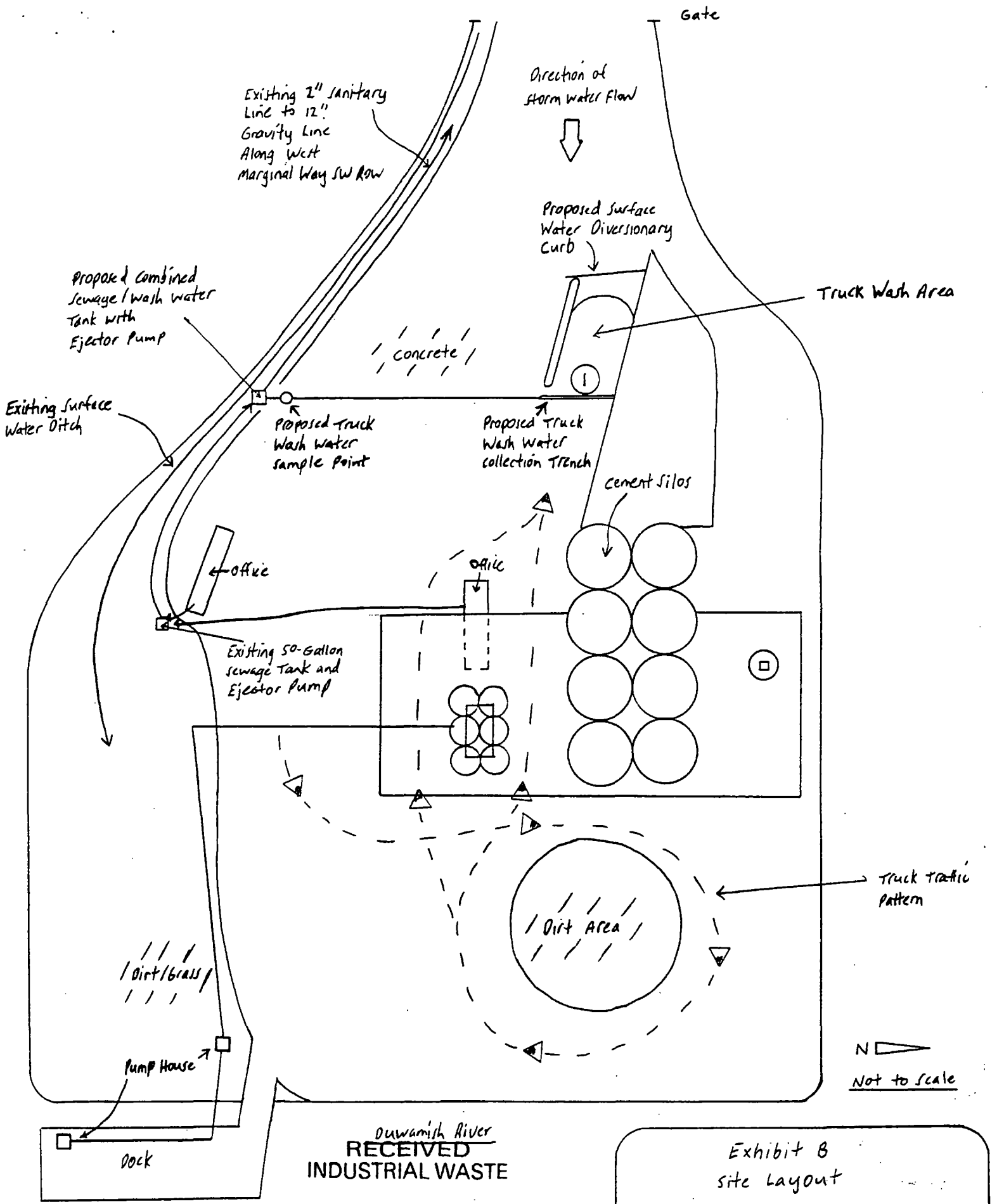

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Exhibit B
site Layout

Lone Star Northwest
5900 West Marginal Way SW
Seattle, Washington 98106

EXHIBIT C

PLANNED CHANGES IN PRETREATMENT OR WASTE DISPOSAL PRACTICES

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Currently, wastewater generated from the wash down of trucks at the Lone Star Northwest West Marginal Way SW facility is discharged to an unlined surface water ditch located along the southern portion of the property (see Exhibits A and B). Lone Star Northwest is requesting authorization to discharge this wash water to the Metro sewer system.

Because the truck wash water has not changed and is not anticipated to change over time, pretreatment of the wash water is not proposed as part of this permit application package. However, as shown in Figure C-1, several changes to the existing truck wash area would be made. These changes include installation of a curb along the western portion of the truck wash to divert surface water away from the wash water collection trench, installation of a new wash water collection trench, and installation of a wash water sampling port and combined sanitary water/washing water/storm water tank and ejector pump.

The combined sanitary water/washing water/storm water would be pumped through an existing 2-inch line to the 12-inch gravity sewer line along the West Marginal Way SW right-of-way. Based on water balance calculations provided in Section D (Exhibit H) of this permit application, the maximum total flow through the line would be 17,907 gallons/day or approximately 13 gallons/minute (exclusive of any evaporation). This flow is well-within the capacity of the existing 2-inch line, even during periods of peak design flows.

Solids that accumulate in the wash water collection trench are removed as necessary and landfill disposed. There are no planned changes for this waste disposal practice.

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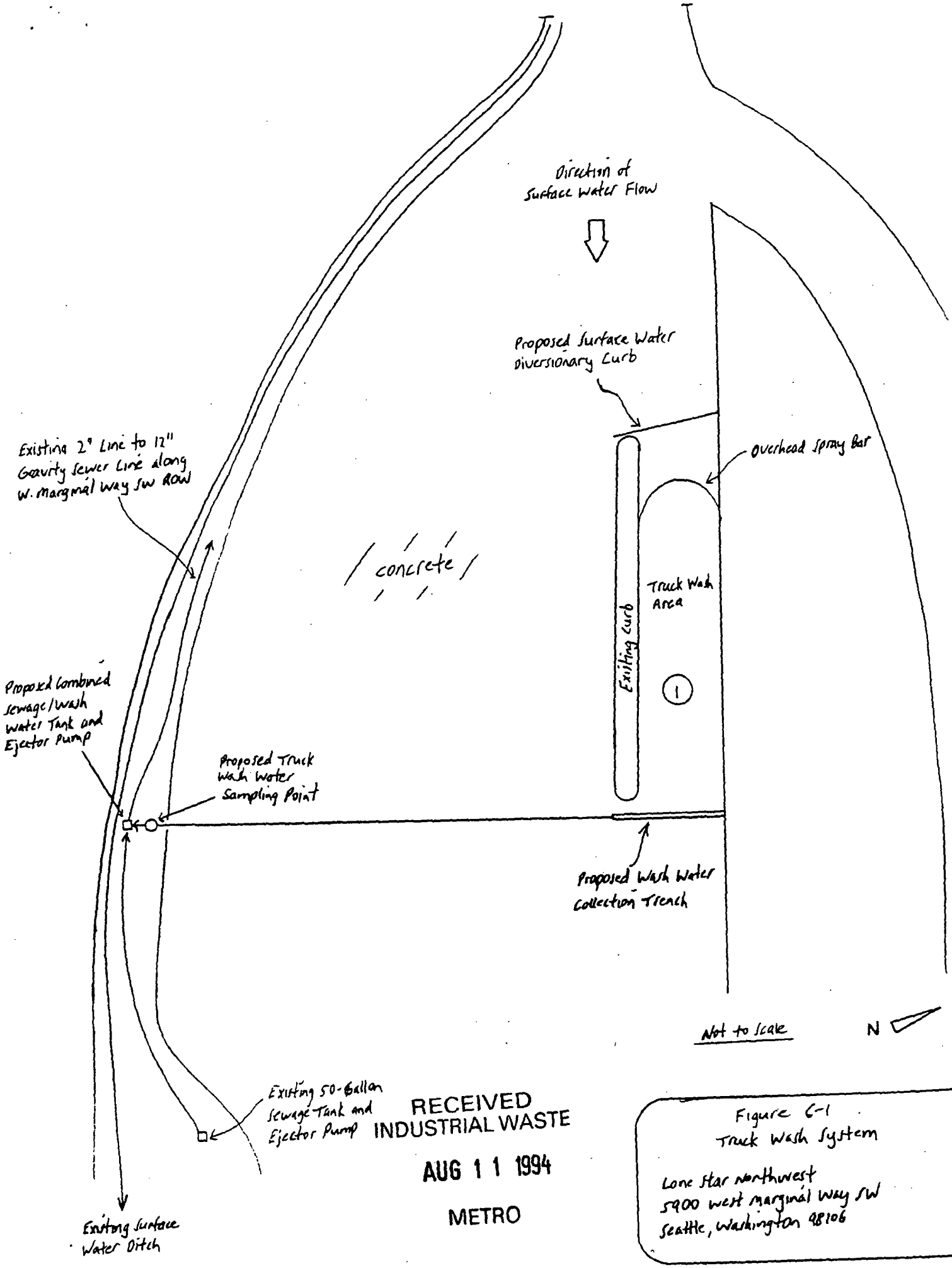

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Figure C-1
Truck Wash System

Lone Star Northwest
5900 West Marginal Way SW
Seattle, Washington 98106

EXHIBIT D

ANALYTICAL OR HISTORICAL DATA

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Laucks 1908
Testing Laboratories, Inc.
940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063
Chemistry, Microbiology, and Technical Services

Certificate of Analysis

CLIENT: Lone Star Northwest
P.O. Box 1730
Seattle, WA 98111

ATTN : Darrell Herman

Work Order# : 94-07-516
DATE RECEIVED : 07/14/94
DATE OF REPORT: 07/26/94
CLIENT JOB ID : EO 94-617

Work ID : WMCT
Taken By : Client
Transported by: Hand Delivered
Type : Water

SAMPLE IDENTIFICATION:

	Sample Description	Collection Date
01	WMCT Discharge	07/14/94 10:00

FLAGGING:

The flag "U" indicates the analyte of interest was not detected, to the limit of detection indicated.

ATTACHMENTS:

Following presentation of sample results, the following appendices are attached to this report:

Appendix A: Method Blank Report
Appendix B: Duplicate Report
Appendix C: Standard Reference Material Report
Appendix D: Chain-of-Custody

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Testing Laboratories, Inc.
940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063
Chemistry, Microbiology, and Technical Services

CLIENT : Lone Star Northwest

Certificate of Analysis

Work Order # 94-07-516

TESTS PERFORMED AND RESULTS:

Analyte	Units	01
Biochemical Oxygen Demand	mg/L	5.
Non-Polar O&G, gravimetric	mg/L	5. U
Settleable Solids, Imhoff	ml/L	0.5 U
Total Suspended Solids	mg/L	230.
pH	gl elec @25C	10.6

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CHAIN OF CUSTODY RECORD

WORK ORDER ID# 9407516

DATE July 14, 1994 PAGE 1 OF 1

Laucks
Testing Laboratories, Inc.
[illegible] South Harney St. Seattle WA 98134 (206) 767-5060 FAX 767-5063

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

NAME: LONE STAR NORTHWEST
ADDRESS: PO Box 1730
SEATTLE WA 98111
ATTENTION: Ed Owens
PROJECT NAME: WMCT
PROJECT CONTACT: Ed Owens
TELEPHONE/FAX: 764-3032 764-3012
P.O. NO.: EO 94-1617
SAMPLER (SIGNATURE): E Owens
(PRINTED NAME): Ed Owens

SAMPLE ID / LOCATION	DATE	TIME
WMCT # 1 DISCHARGE	7/14/94	1010
WMCT # 2 DISCHARGE	7/14/94	1012
WMCT # 3 DISCHARGE	7/14/94	1014

TESTS TO PERFORM: pH; BOD; TOTAL SUSPENDED; TOTAL SETTLEABLE; NUMBER OIL & GREASE

One sample

NO. OF CONTAINERS	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	
1	
1	

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INSTRUCTIONS
1. USE ONE LINE PER SAMPLE.
2. BE SPECIFIC IN TEST REQUESTS.
3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

BILLING INFORMATION IF DIFFERENT THAN ABOVE
NAME
ADDRESS
ATTN: SAME AS ABOVE
CITY, STATE, ZIP

TURNAROUND REQUEST
☐ 24-48 HRS (100% SUR)
☐ 5-DAYS (50% SUR)
☒ STD. 10-14 DAYS
☐ OTHER _____

3 TOTAL NO. OF CONTAINERS

CHAIN OF CUSTODY SEALS?
☐ YES ☐ NO ☑ NA

SHIPPED VIA:
☐ UPS ☐ FED-EX ☐ BUS
☒ HAND ☐ _____

TEMPERATURE _____
☐ AMBIENT ☐ REPRESENTATIVE

RELINQUISHED BY (SIGN AND PRINT)	DATE / TIME	RECEIVED BY (SIGN AND PRINT)	DATE / TIME
E Owens Ed Owens	7/14/94 1026		
		Charlene Dy	7/14/94 1026

LAUCKS TESTING LABS

208 764 3012 LONE STAR NORTHWEST Page 4/4 Job 132 Aug-08 Mon 13:25 1994

EXHIBIT E

SPILL PREVENTION AND CONTAINMENT PLAN

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The Lone Star Northwest West Marginal Way SW facility is a storage/transfer station for dry cement. Almost the entire facility is covered with concrete. As presented in Section C, only minor amounts of chemicals are used and consumed onsite. The yard and associated onsite equipment is inspected and maintained as necessary. A spill prevention and containment plan is not applicable for this site.

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EXHIBIT F

ENGINEERING REPORT

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An engineering report for a wastewater pretreatment system is not applicable to this discharge permit application for the Lone Star Northwest West Marginal Way SW facility. Truck wash water from the facility has not changed and is not anticipated to change over time. Therefore, pretreatment of the wash water is not proposed as part of this permit package.

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EXHIBIT G

HYDROGEOLOGIC REPORTS FOR LONG-TERM GROUNDWATER REMEDIATION

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A hydrogeologic report for long-term groundwater remediation is not applicable to this site or this permit application.

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EXHIBIT H

DOCUMENTATION OF WATER BALANCE CALCULATIONS

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The Lone Star Northwest West Marginal Way SW facility has the following types of water use/discharges:

- Sanitary water/wastewater
- Stormwater
- Plant washing water/wastewater
- Evaporation.

All other water use/discharge types are not applicable to this site. Calculations for evaporation are applicable only to stormwater and plant washing water/wastewater. The following parameters were used in the water balance calculations:

- Total size of site = 283,140 ft^2 (6.5 acres)
- Size of truck wash area = 1,215 ft^2
- Water usage by office employees = 20 gallons/day (Uniform Plumbing Code [UPC])
- Water usage to wash down trucks = 300 gallons/truck
- Rainfall from a 25-year, 24-hour design storm event = 3.4 inches (King County, Washington, Surface Water Design Manual, January 1990)
- Average rainfall per year in the Seattle area (1961 - 1990) = 37.19 inches (National Weather Service)
- Evaporation rate = 5 inches per day (average data from the National Weather Service for Puyallup, Washington during July - October, 1992).

Sanitary water/wastewater calculations are based on UPC standards for office employees. The number of employees onsite is specified in Section C, part 3. The water would be discharged to the sewer system. It is assumed that each employee would retain 0.5 gallons of water per day.

- Average water in = 10 employees x 20 gallons = 200 gallons/day
- Maximum water in = 17 employees x 20 gallons = 340 gallons/day.
- Avg water discharge = 10 employees x (20 gal used - 0.5 gal retained) = 195 gallons/day
- Max water discharge = 17 employees x (20 gal used - 0.5 gal retained) = 332 gallons/day.

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Stormwater calculations are based on National Weather Service data for average rainfall for the Seattle area and on the King County design manual for a 25-year, 24-hour storm event. Stormwater would be discharged to the sewer (proposed) and unlined surface water ditch.

- Avg water in = (37.19"/12)(283,140 ft^2 of total site)/(365 days per year) = 17,984 gallons/day
- Max water in = (3.4"/12)(283,140 ft^2 of total site) = 600,108 gallons/day.

- Avg water discharge to sewer = (37.19"/12)(1,215 ft^2 of truck wash)/(365 days per year) = 77 gallons/day
- Max water discharge to sewer = (3.4"/12)(1,215 ft^2 of truck wash) = 2,575 gallons/day.

- Avg water discharge to unlined surface water ditch = (37.19"/12)(283,140 ft^2 of total site - 1,215 ft^2 of truck wash)/(365 days per year) = 17,907 gallons/day
- Max water discharge to unlined surface water ditch = (3.4"/12)(283,140 ft^2 of total site - 1,215 ft^2 of truck wash) = 597,533 gallons/day.

Plant washing water/wastewater is generated from the truck wash down operation. This water would be discharged to the sewer system (proposed).

- Avg water use = (12 trucks)(300 gal) = 3,600 gallons/day
- Max water use = (50 trucks)(300 gal) = 15,000 gallons/day.

- Avg water discharge to sewer (proposed) = (12 trucks)(300 gal) = 3,600 gallons/day
- Max water discharge to sewer (proposed) = (50 trucks)(300 gal) = 15,000 gallons/day.

Evaporation was assumed to affect only stormwater and plant washing water/wastewater flows. It was assumed that storm events were followed by evaporation, and that the average rate of evaporation obtained from the National Weather Service for Puyallup, Washington during the months of July - September, 1992 applies to the Seattle area and that evaporation occurs only during these months of the year. It was also assumed that there are no seasonal changes in plant washing water/wastewater flows during the year. Once the daily evaporation rate was calculated, the total rate of evaporation over the 3-month period was determined then averaged over a 1-year period. Average and maximum evaporation rates were assumed to be the same unless noted.

- Avg/max evaporation of plant washing water/wastewater = (5"/12)(1,215 ft^2 of truck wash area)(365/4)/365 = 947 gallons/day.

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- Avg evap of stormwater = (5"/12)(283,140 ft^2 of total site)(365/4)/365 = 220,628 gallons/day. Because this rate of evaporation exceeds the average daily inflow of stormwater, the average rate of evaporation of stormwater will be set equal to the volume inflow of stormwater = 17,984 gallons/day
- Max evaporation of stormwater = (5"/12)(283,140 ft^2 of total site)(365/4)/365 = 220,628 gallons/day.

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